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ABSTRACT

This paper discusses the use of compliance tests and evaluation tests in two experiments dealing with specific questions of acceptability in English syntax. The experiments, conducted in 1970 at the University of Wisconsin--Milwaukee, involved undergraduate students in their third or fourth years. The compliance tests, which are operation oriented and require that a task be performed on a sentence, were given before the evaluation tests, which elicit attitudes and require an explicit judgment on the acceptability of a sentence. The results of both tests are discussed and compared for the following: intensifiers, disjuncts, time adverbs, adjectives in extraposed ("it") clauses, adjective clauses, coordination ellipsis, and jumbled sentences. Tables of results and appendixes which include some of the tests and instruction sheets are attached. (LL)

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ACCEPTABILITY EXPERIMENTS: COMPLIANCE AND EVALUATION TESTS*

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Introduction

The experiments described here deal with specific questions of acceptability in English syntax. The results were taken into account during the writing of the reference grammar by Quirk et al. 1972 and its derivative by Quirk and Greenbaum 1973.

Two experiments (UWMa and UWMb) were conducted in 1970 at the University of Wisconsin-Milwaukee. The experiments incorporated various types of tests, some of which have been described elsewhere (Greenbaum 1974, 1976, in press a and b). This paper reports on the compliance and evaluation tests (Greenbaum and Quirk 1970, 1-18). Evaluation tests elicit attitudes; they require an explicit judgement on the acceptability of a sentence. Compliance tests, on the other hand, are operation tests; they require that a task be performed on a sentence.

The subjects were undergraduate students (all native speakers of English) in their third or fourth years at the university: 81 in UWMa and 36 in UWMb.[1] They were predominantly female and from Wisconsin and neighboring states.[2]

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Appendix I contains four Tables listing the material used in the experiments and a summary of the results. Tables 1 and 2 present the two batteries of compliance tests, the first for UWMa and the second for UWMb, while Tables 3 and 4 present the corresponding batteries of evaluation tests. Individual tests and sentences are referred to by a combination a or b (i.e. UWMa or UWMb) plus a numeral denoting the list number in Tables 1-4. A compliance test and its corresponding evaluation test are linked by having the same reference. The first column in Tables 1 and 2 lists the test sentences, while the second column lists the tasks. N with a superscript indicates that subjects were required to replace the relevant noun by the listed noun: for example, in Table 1, sentence 1 the instruction was 'Replace price by prices'. The last columns give the number of relevant noncompliances (RNC) in the responses and their percentage for the total number of subjects. When totals for noncompliance scores are given, the intention is always RNC scores. RNC scores comprise total omissions and changes that evade the linguistic problem under investigation (Greenbaum and Quirk 1970, 20). For example, in Table 1, sentence 1 the problem was the acceptability of practically between auxiliary and main verb: omission of practically or the auxiliary, substitution of another adverb, and transposition of practically constitute RNC changes; the changes provide some indication of the extent to which subjects are unhappy with practically in that position.

In Tables 3 and 4 the first four symbols in the columns following the sentences give the totals for the four responses allowed to subjects:

+ perfectly natural and normal
- wholly unnatural or abnormal
½ somewhere between these two extremes ('a bit dubious', perhaps)
? not sure

The symbol '/' indicates failure to respond.

Procedures were the same in both experiments. The compliance battery was given before the evaluation battery to avoid giving subjects the impression that they were being asked to evaluate the sentences in the compliance tests. Four practice compliance tests were presented at the beginning of the battery.

The tests were given to subjects individually and were randomized afresh for each subject.[3] In both the compliance and the evaluation tests the material was presented visually and the subjects responded in writing.[4] Each compliance test appeared on a separate slide that was projected onto a small screen in front of the subject: the slide was visible for three seconds and the subject then had 15 seconds in which to write down his response.[5] For the evaluation component, the subject was given a booklet, on each page of which there was a sentence for evaluation. He was allowed five seconds for recording his response before being told to turn to the next page. The subject was asked to read an instruction sheet before each component. The instruction sheets are in Appendix II.

I: INTENSIFIERS

Compliance		Task	RNC Scores	Percent
a1.	The price has practically doubled.	N_1^1: prices	16	20
a2.	The price practically has doubled.	N_1^1: prices	43	53
a3.	He could hardly sit still.	N_1^1: they	1	1
a4.	He hardly could sit still.	N_1^1: they	42	52
a5.	He badly needed the money.	N_1^1: they	14	17
a6.	I despise him utterly.	past	13	16
a7.	I utterly despise him.	past	1	1
a8.	His arrival was utterly expected.	present	24	30
a11.	The car certainly broke down.	question	43	53
a17.	You will surely believe him.	negative	71	88
a18.	You will certainly want this.	negative	73	90
b8.	They greatly admire his courage.	question	8	8
b9.	They utterly hate that course.	question	11	11
b10.	He humbly presented his apologies.	question	15	16

Evaluation		+	-	±	?	/
a1.	The prices have practically doubled.	79 (99%)	1 (1%)	0	0	1
a2.	The prices practically have doubled.	39 (48%)	14 (17%)	28 (35%)	0	0
a3.	They could hardly sit still.	80 (99%)	0	1 (1%)	0	0
a4.	They hardly could sit still.	41 (52%)	11 (14%)	25 (32%)	2	2
a5.	They badly needed the money.	52 (64%)	7 (9%)	22 (27%)	0	0
a6.	I despised him utterly.	46 (57%)	9 (11%)	25 (31%)	1	0
a7.	I utterly despised him.	74 (91%)	2 (2%)	5 (6%)	0	0
a8.	His arrival is utterly expected.	21 (26%)	27 (33%)	29 (36%)	4	0
a11.	Did the car certainly break down?	7 (9%)	29 (36%)	43 (54%)	1	1
a17.	You won't surely believe him.	14 (17%)	23 (29%)	42 (52%)	1	1
a18.	You won't certainly want this.	16 (20%)	26 (33%)	37 (47%)	0	2
b8.	Do they greatly admire his courage?	65 (71%)	6 (7%)	20 (22%)	1	4
b9.	Do they utterly hate that course?	53 (56%)	11 (12%)	25 (27%)	5	2
b10.	Did he humbly present his apologies?	65 (70%)	10 (11%)	17 (18%)	1	3

Intensifiers have a heightening or lowering effect on the force of the verb (cf. Greenbaum 1969, 127-147; Greenbaum 1970, 23-32; Bolinger 1972, 160-175, 192-266; Quirk et al. 1972, 8.19-33). Three groups of intensifiers appeared in the experiments:

(a) downtoners, e.g. hardly

(b) amplifiers, e.g. greatly

(c) emphasizers, e.g. certainly

Tests a1-a8 concerned the positions of intensifiers in declarative sentences: in a1-a4 the downtoners hardly and practically were tested for the acceptability of the positions before and after an auxiliary, the auxiliary being could with hardly and have with practically. For both downtoners the norm is post-auxiliary. In compliance test a3, apart from one failure to respond, all subjects retained hardly in the position given to them: could hardly sit. On the other hand, in compliance test a4, where they were given hardly could sit, 41 subjects transposed hardly to post-auxiliary. Evaluation tests a3 and a4 corroborate the compliance tests: there is near-unanimity in fully accepting hardly in post-auxiliary position, whereas there are many objections to the pre-auxiliary position. The evaluation tests for practically (a1 and a2) closely parallel those for hardly, but there are some differences in the compliance tests. In a1, 16 of the subjects (20%) failed to place practically in the required post-auxiliary position: have practically doubled. In a few instances there were omissions of practically, the lexical verb, or the auxiliary; however, ten of the changes were replacements of practically by another adverb, mostly actually. The replacement suggests that the main problem

for those subjects was not the position of the downtoner; it was that they regarded practically as an unusual downtoner or its collocation with doubled as unusual. In a2, on the other hand, there was another problem that took precedence: pre-auxiliary position of the downtoner was felt to be deviant. Hence, 35 subjects - most of those that failed to comply - transposed practically to post-auxiliary position. For hardly we have corroborating evidence from a word-placement test which required subjects to place hardly in the position that seemed most natural and normal to them in the sentence He could sit still (Greenbaum 1976). Post-auxiliary position was selected by almost everybody. In addition, there is comparative information from compliance and evaluation tests on both hardly and practically with British speakers. The results also showed that post-auxiliary position was the norm for both downtoners (Greenbaum and Quirk 1970, 121 and 131).[6]

Badly is a booster, a subcategory of amplifiers denoting a high degree (Quirk et al. 1972, 8.23-27). In a5, badly is positioned before the verb. The evaluation test showed that over a third of the subjects are unhappy with the sentence They badly needed the money. The compliance test pinpointed the reason for their dissatisfaction: ten subjects moved badly to the end of the sentence. Corroboration also comes from a word-placement test requiring badly to be used with He needed the money: 74% selected final position and only 26% preverb position (Greenbaum 1976). Similarly, when in a preference test subjects were asked to rate the acceptability of both He needed the money badly and He badly needed the money, the former was fully accepted by 72% and the latter by only 46%. However, British speakers seem to accept the preverb position. When compliance test a5 was given to undergraduates at a British university, none transposed badly (Greenbaum 1970, 64f.).

Utterly belongs to the maximizer subcategory of amplifiers (Quirk et al. 1972, 8.23–27), denoting an upper extreme. Compliance and evaluation tests a6 and a7 demonstrate that the preferred position for utterly is preverb, as in I utterly despised him. In the compliance test a6, 13 subjects transposed utterly to preverb, while there were no transpositions of preverb utterly in a7. We find congruent evidence in two word-placement tests: in one 89 subjects (93%) selected preverb position, responding with I utterly despise them; in the other, 52 (90%) responded with They all utterly hate that course (Greenbaum 1976).

In compliance test a8 utterly is preverb in the target sentence His arrival is utterly expected, the normal position, and therefore there were no transpositions of the booster. The linguistic problem was thought to be the deviance of the collocation of utterly with expect, since utterly tends to collocate with items that have some 'negative' implication (Greenbaum 1970, 50–55, 73–75). Dissatisfaction would therefore be expressed by omission of the booster or the verb or by replacement of the booster or the verb. In fact, 9 subjects omitted utterly and 5 omitted expected; 5 replaced utterly with other adverbials [certainly, most, early (placed finally), every day, presently] and 3 replaced expected (unexpected twice, late). Dissatisfaction with the collocation utterly expected is presumably reflected in the low acceptability rating given to the sentence in evaluation test a8.

The acceptability of the intensifier certainly in a question was tested in compliance test a11. The noncompliances indicated that the deviance was felt to involve certainly and the question form of the sentence: 30 omitted certainly, 6 replaced it with other synonymous forms

(really, for certain, and a restructuring with Is it certain...), and 3 left the sentence as a declarative. The deviance in the sentence is recorded in the very low acceptability rating given in all. Similar results were obtained from British subjects (Greenbaum and Quirk 1970, 125 and 135).

The intensifiers surely and certainly do not come within the domain of clause negation. This can be demonstrated through the failure of subjects to retain these intensifiers in pre-verb position when the sentence is negated, though they retain the intensifier really as pre-verb (cf. Greenbaum 1969, 136-138). The compliance tests a17 and a18 produced a large number of transpositions, for both intensifiers mainly to pre-auxiliary and pre-negative positions. Thus, of the 71 noncompliances for surely, 30 (37%) were transpositions of the intensifier before the auxiliary and 24 (30%) before the negative particle; for the 73 noncompliances for certainly, the respective figures are 40 (49%) and 22 (27%). The acceptability ratings for both You won't surely believe him and You won't certainly want this are low. In a similar compliance test with British subjects, where the sentence to be negated was He can certainly drive a car, almost all transposed certainly, predominantly before the auxiliary (Greenbaum 1969, 236f.).

Earlier work with British subjects had shown that in a declarative sentence the intensifier badly was preferred in preverb position while in a question sentence-final position was preferred (Greenbaum 1970, 64-66). American subjects however, favor final position for the intensifier badly in declarative sentences (Greenbaum 1976, 11). Two other intensifiers

were therefore chosen to investigate whether their positional norm was affected by the question form of the sentence. The norm for the intensifiers greatly and utterly has been found to be preverb; word-placement tests yielded the dominant orders They all greatly admire his courage and They all utterly hate that course (Greenbaum 1976, 4, 11). On the whole, compliance tests b8 and b9, which have sentences almost identical to the word-placement norms, produced relatively few noncompliances. In b8, two failed to turn the sentence into a question and three transposed greatly to final position; in b9, four failed to make the required transformation, one transposed utterly, and one replaced utterly with really. For comparison, the formulaic adjunct humbly was tested. Formulaic adjuncts similarly favor preverb position (Quirk et al. 1972, 8.44). There were somewhat more noncompliances: seven failed to produce a question and six transposed humbly to final position. (A number of lexical changes suggest that some subjects objected to the collocation of humbly with present his apologies.) The evaluation tests gave a fairly high acceptability rating for the questions with greatly and humbly, but a somewhat lower rating for the question with utterly. For all three there were a considerable number that thought the sentences dubious.

II: DISJUNCTS

Compliance		Task	RNC Scores	Percent
a12.	He probably stayed late.	question	43	59
a13.	They possibly left early.	question	28	35
a14.	They perhaps came late.	question	36	44
b11.	Honestly, it did rain the whole day.	N^3: week	21	22
b12.	Wisely, she did mail it on Monday.	N^3: Tuesday	22	23
b13.	Proudly, they did march out of the palace.	N^2: hall	33	34

Evaluation		+	-	±	?	/
a12.	Did he probably stay late?	12 (15%)	34 (43%)	30 (38%)	3	2
a13.	Did they possibly leave early?	49 (62%)	9 (11%)	21 (27%)	0	2
a14.	Did they perhaps come late?	50 (62%)	5 (6%)	24 (30%)	1	1
b11.	Honestly, it did rain the whole week.	74 (77%)	8 (8%)	14 (15%)	0	0
b12.	Wisely, she did mail it on Tuesday.	53 (57%)	18 (19%)	21 (23%)	1	3
b13.	Proudly, they did march out of the hall.	30 (31%)	29 (30%)	37 (39%)	0	0

Probably, possibly, and perhaps are disjuncts expressing some degree of doubt as to the truth-value of what is being said (Quirk et al. 1972, 8.82). Experiments with British subjects have shown that sentences in which these disjuncts appear in questions are marginal in acceptability and that probably is the least acceptable of the three (Greenbaum and Quirk 1970, 152f.). In those experiments, the time reference in the sentences was future, marked by the auxiliary will. Evidence was sought for the suggestion that the acceptability of probably decreases markedly when the time reference is past, whereas past time reference does not affect the acceptability of perhaps and possibly (Greenbaum 1969, 153 Note). Tests a12, a13, and a14 presented the three sentences with past time reference to American subjects. The American subjects tended to produce more noncompliant responses for all three sentences, but there is a greater gap between the numbers for the sentence with probably and those for the sentences with perhaps and possibly:

RNC Scores

	British	American
probably	27%	59%
possibly	25%	35%
perhaps	17%	44%

The difference is more conspicuous for the evaluation results:

Complete Rejections

	British	American
probably	15%	42%
possibly	10%	11%
perhaps	13%	6%

One of the differences between subject adjuncts and subject disjuncts is that the former do not seem to be able to precede an emphatic auxiliary (Quirk et al. 1972, 8.43). This suggested difference is tested in a12, which contains the subject disjunct wisely, and a13, which contains the subject adjunct proudly. Honestly in b11 is a style disjunct (Quirk et al. 1972, 8.80). It was expected that with respect to this syntactic feature wisely would behave more like honestly than like proudly. The expectation was fulfilled in the compliance tests, where the results for a11 and a12 are very close. Most of the compliances in all three tests involved omission of the adverb or the rest of the sentence after the adverb or failure to retain the emphatic auxiliary. In the evaluation tests, a12 is approximately intermediate in acceptability ratings for the three tests.

III: TIME ADVERBS

Compliance		Task	RNC Scores	Percent
a9.	The students explained the problem soon.	N_1^1: student	29	36
a10.	Your brothers like the house soon.	N^1: brother	39	48
b4.	His son despises the school quickly.	past	27	28
b5.	My friend quickly trusts such people.	past	18	19
b6.	Your brother owns the house soon.	past	56	59
b7.	The student soon explains the problem.	past	19	20
a15.	He can usually explain what they mean.	negative	37	46
a16.	He can often write well.	negative	35	43
b1.	He tells always the truth.	future	88	92
b2.	She plays quietly the piano.	future	68	71
b3.	They help mainly the old.	future	26	27

Evaluation		+	-	≈	?	/
a9.	The student explained the problem soon.	18 (22%)	31 (39%)	29 (36%)	2	1
a10.	Your brother likes the house soon.	0	68 (84%)	11 (14%)	2	0
b4.	His son despised the school quickly.	37 (39%)	28 (29%)	31 (32%)	0	0
b5.	My friend quickly trusted such people.	56 (60%)	16 (17%)	20 (21%)	2	2
b6.	Your brother owned the house soon.	9 (9%)	73 (77%)	12 (13%)	1	1
b7.	The student soon explained the problem.	87 (91%)	1 (1%)	7 (7%)	1	0
a15.	He can't usually explain what they mean.	56 (60%)	7 (9%)	16 (17%)	0	2
a16.	He can't often write well.	37 (46%)	14 (17%)	29 (36%)	1	0
b1.	He told always the truth.	19 (20%)	52 (55%)	21 (22%)	2	2
b2.	She played quietly the piano.	4 (4%)	75 (78%)	17 (18%)	0	0
b3.	They helped mainly the old.	45 (47%)	18 (19%)	32 (33%)	1	0

Quickly is an example of an adverb that can refer either to the speed of an activity or process or to the speed of the inception of what is being predicated. In the first use it is closer to a manner adverb and in the second to a time adverb. In its temporal use, quickly belongs to a set of adverbials that include immediately, instantly, at once, shortly, soon, before long, after a (short) time, (with)in a short time. The manner use can be illustrated in

He ate his lunch quickly ('ate in a way that took a short time')

and the temporal use in

He quickly forgot about the insult ('came to forget', 'started to forget')

We should also note the corresponding structures for each of the two sentences:

He was quick in eating his lunch

He was quick to forget about the insult

If, as with forget, the verb does not refer to an activity or process,

quickly must be temporal. If, however, the verb does refer to an activity or process, both interpretations are possible, though usually the context will in large measure determine the interpretation. In particular, communicative verbs are open to the temporal meaning:

I don't understand what's going on; he's telling the story too quickly (manner)

She didn't like his attitude, and she quickly told him so (temporal)

Like quickly in having a temporal inceptive use as well as a manner adverb are gradually, rapidly, slowly, suddenly, swiftly. Here are some further examples of the temporal use:

They slowly realized the significance of his action

He suddenly remembered that he had a previous appointment

We should rapidly feel the effects of this devaluation

She swiftly began to complain about the heat

They will gradually like their new school

When he saw the blood spurting from the wound, he quickly phoned for an ambulance

They asked for his help, but he swiftly replied that he was too busy

They read the report and rapidly denied being in any way negligent

They noticed his expression and quickly asked him whether anything was the matter

The adverb appears to be attracted initially or before the verb when it is temporal but finally when it is manner (Quirk et al. 1972, 8.37).

Tests b4 and b5 were intended to provide evidence of this tendency. Only the temporal interpretation of quickly is admissible with the verbs despise and trust, and it was therefore expected that the sentence in b5 would be preferred, since quickly is there preverb. The preference is shown by the lower noncompliance score and the higher acceptability rating for b5. The changes made in compliance test b4 also indicate that the position of quickly was a major contribution to the unacceptability of the sentence. Five subjects transposed quickly to preverb and two replaced quickly by soon and transposed soon to preverb. There were also four replacements of quickly by adverbs that are acceptable in final position: greatly (twice), quietly, now. By contrast, in b5 there was only one transposition (finally) and no replacements of quickly. In both tests, some subjects omitted quickly (b4-15, b5-9) or the whole sentence (b4-1, b5-6), and in b5 one subject replaced trusted by mistrusted. The omissions and substitutions (soon, mistrusted) suggest that for some subjects the collocation of specific verb and adverb may constitute a problem. That would also explain the minority of total rejections in b5, where quickly is preverb.

In contrast to quickly, the adverb soon always has a temporal inceptive use, whether the verb is an activity verb (as in a9 and b7) or not (as in a10 and b6). Like quickly in that use, the normal position is the preverb position, as is shown by the evaluations for a9 and b7, where the only difference in the sentences was the position of soon. The rejections of the final position were even more numerous in a10, with emotive like, and in b6 with relational own. The compliance test results indicate that the position was at least partly the problem, since there were no trans-

positions of soon in b7 but several in the other three tests (a9-7, a10-3, b6-7). However, for all the compliance tests there were a large number of omissions, either of soon alone or of the whole sentence (15 in a9 and b7, 23 in a10, and 34 in b6). One other frequent correction was the change of temporal reference by the insertion of will or would:

Your brother will own the house soon.

Future reference allows soon to be positioned finally, whatever the formal means of introducing future reference:

He'll be writing to you soon
Send it to me soon
I expect to own the house soon

The reason for the positional difference may be that soon with past reference has partly a connective function, linking back to some previous event or state ('within a short time after that'), whereas soon with future reference connects only with the time of speaking or writing ('within a short time from now'). Adverbials with a connective function tend to appear early within their clause (Jacobson 1964, 151). The connective function may also be the explanation for the many omissions in the compliance tests, even in the acceptable b7: a sentence containing a connective item may be felt to be slightly odd in isolation. Even when there is no future reference, final position seems also to be allowed if soon is modified:

The student explained the problem { (much) too soon / pretty soon

The explanation may lie in the greater weight of the adverb, which tends to move it to final position (cf. Jacobson 1964, 106f.). Final position is also normal for the comparative, partly for the same reason but also - as with future reference - because the connection is made within the clause rather than to a previous text:

The student explained the problem sooner than { I expected / I did }

In a previous British experiment, subjects were asked to negate the sentences

He can often explain what they mean

He can usually write well

and later to evaluate the negative sentences with the adverb positioned immediately after the negative particle. In was expected that in the compliance tests both adverbs would be retained after the negative particle and that in the evaluation tests both sentences would be judged acceptable. In the event, the sentence with <u>often explain</u> was fully accepted by 70% of the subjects but the sentence with <u>usually</u> by only 52%. In both compliance tests the adverb was transposed by some subjects - 15% for <u>often</u> and 33% for <u>usually</u>. It was suggested (Greenbaum 1969, 181f.) that the relatively low acceptability of the sentence with <u>usually</u> had nothing to do with the position of <u>usually</u>, but was because the negative of <u>He can write well</u>, where <u>can</u> has a characteristic meaning, is <u>He doesn't write well</u>. If that was so, the results for the sentences would be similar if the adverbs were exchanged, as in a15 and a16. The results for the evaluations tests are in the expected direction. The sentence with <u>usually</u> rose to 69% full acceptance, while the sentence

with *often* dropped to 46%. In compliance test a16 three subjects substituted *doesn't* for *can't*, providing some evidence for the suggestion that the normal negation is *doesn't* and for the explanation of the British results. However, there were somewhat more transpositions of *usually* (32%) than of *often* (27%), and it is significant that all but one of the transpositions of *usually* were to pre-modal position whereas *often* was moved to several different positions. It would appear that a considerable minority were unhappy with *usually* in the position after the negative particle, and therefore that was an additional factor in the acceptability rating, so that a15 with *can't usually explain* did not elicit as high an acceptability rating as *can't often explain* in the British experiment.

In b1 a time frequency adverb, *always*, is positioned between the verb and the direct object. That position is normally avoided by adverbs, unless the direct object clearly has greater weight than the adverb (cf. Jacobson 1964, 142). The sentence *He told always the truth* was generally considered unacceptable or dubious in evaluation test b1. In the corresponding compliance test most subjects moved *always*. Most (79%) placed *always* between the auxiliary and the verb *He will always tell the truth*. Tests b2 and b3 were given for comparison. *Quietly* in b2 is a manner adverb, also unacceptable between the verb and the direct object. However, the rectifications in the compliance test were not the same as for b1. The normal position of adverbs is final and that position was selected by 29% for *quietly*, though no subjects placed *always* finally; 25% transposed *quietly* to preverb position. The restrictive adjunct *mainly* in b1 focusses on the direct object *the old*. In formal writing adjuncts focussing on the direct object are often placed before it, though preverb position is common in speech (Quirk et al. 1972, 8.13-15). There was greater

acceptance for the position before the direct object in b3. In the compliance test 15% moved mainly to preverb position.

IV: ADJECTIVES IN EXTRAPOSED - 'IT' CLAUSES

Compliance		Task	RNC Scores	Percent
a23.	It's presumable that Sylvia will leave home.	N_3^2: she	10	12
a24.	It's sure that he smokes cigarettes.	N_2^3: cigars	9	11
b18.	It's sure that Sylvia will leave home.	N_2^2: she	18	19
b19.	It's presumable that he smokes cigarettes.	N_2^3: cigars	21	22
b20.	It's certain that she writes poems.	N^3: novels	5	5

Evaluation		+	-	±	?	/
a23.	It's presumable that she will leave home.	67 (83%)	3 (4%)	10 (12%)	1	0
a24.	It's sure that he smokes cigars.	35 (44%)	13 (16%)	30 (37%)	2	1
b18.	It's sure that she will leave home.	71 (76%)	9 (10%)	12 (13%)	2	2
b19.	It's presumable that he smokes cigars.	68 (72%)	7 (7%)	19 (20%)	1	1
b20.	It's certain that she writes novels.	80 (85%)	3 (3%)	11 (12%)	0	2

As an attitudinal disjunct, certainly has a corresponding it is certain that as the superordinate clause of the sentence, but the analogous correspondences for presumably and surely appear to be of dubious acceptability (Greenbaum 1969, 94-97; cf. '?' after presumably and surely at end of 97). The tests in this set were intended to ascertain if there was experimental evidence for that distinction. Compliance tests a23 with it's presumable that and a24 with it's sure that produced a similar number of noncompliances, but in the evaluation tests 83% fully accepted a23 while only 43% fully accepted a24. Since the difference between the judgements might be due to the difference in time reference - a23 has future reference while a24 has the present tense with generic reference - the tests were repeated with switched subordinate clauses in b18 and b19. A control sentence with it's certain that was added (b20). The evaluation tests

show that the time reference in the subordinate clause has a marked effect on the acceptability of the sentence with it's sure that but not on the sentence with it's presumable that. It is not clear why there should be that difference between the two adjectives or why sure behaves differently in that respect from certain.

V: ADJECTIVE CLAUSES

Compliance	Task	RNC Scores	Percent
b21. Wise, they turn down the offer.	past	23	24
b22. Happy as always, she sings to them.	past	16	17
b23. Delighted, she approves of the plan.	past	9	9
b24. Unemployed, he calls for their help.	past	12	12

Evaluation	+	-	±	?	/
b21. Wise, they turned down the offer.	28 (29%)	42 (44%)	25 (26%)	1	0
b22. Happy as always, she sang to them.	76 (79%)	7 (7%)	12 (12%)	1	0
b23. Delighted, she approved of the plan.	81 (86%)	3 (3%)	10 (11%)	0	2
b24. Unemployed, he called for their help.	62 (65%)	8 (8%)	21 (22%)	4	1

This set of tests concerns adjective phrases functioning as verbless clauses (Quirk et al. 1972, 5.24-5.27). In b21 the adverb wisely - as attitudinal disjunct - is available as a substitute commonly expressing a similar meaning (Quirk et al. 1972, 8.85). Happy in b2 has the corresponding adverb form happily, but the interpretation would be different: either the attitudinal disjunct ('one is happy that') or the manner adjunct ('in a happy manner'). In both interpretations the addition of as always is strange, and in the manner interpretation we would expect happily as always in final position. There are no corresponding adverb forms for delighted in b23 or for unemployed in b24. The two differ in that delighted has a possible verbal interpretation ('Since the plan delighted her') as well as an adjectival interpretation, while unemployed

is isolated from the lexical verb employ by its morphological marking (cf. Svartvik 1966, 134f., 137; Quirk et al. 1972, 5.12-5.15). Since an equivalent adverb is available, we might expect wise to be less acceptable than the others. Furthermore, the greater length of the other phrases (particularly b22) might be expected to increase their acceptability as verbless clauses. The evaluation test results conform to expectations: b21 with wise has a distinctly lower acceptability rating than the other three. b24 with unemployed has a somewhat lower rating than b22 and b23, probably because out of a suitable context the logical relationship between the verbless clause and the rest of the sentence is not as clear as it is in the other two sentences.

The explanations are supported by the rectifications made in the compliance tests. In b21, 15 subjects (16%) replaced wise by wisely and one gave the verbless clause more weight by negating it, not wise. In b22, only 5 (5%) substituted the adverb happily, and one of those indicated that he had interpreted it as a manner adverb by moving happily as always to the end of the sentence. In b23, one subject replaced delighted by the adverb delightfully, an attitudinal disjunct in the context ('it was delightful'), thereby changing the meaning. In b24, there were several attempts at showing the relationship between the two parts of the sentence: the most explicit was one subject's replacement of unemployed by when he was unemployed; two others substituted being unemployed, presumably a causal relationship; and one restructured the sentence as He was unemployed and called for help. Interestingly, one subject substituted re-employed, perhaps because the substitution gave a clearer logical relationship.

VI: COORDINATION ELLIPSIS

Compliance		Task	RNC Scores	Percent
a19.	John had a headache, so didn't go.	N_2^2: cold	39	48
a20.	Henry needed money, yet didn't work.	N_2^1: food	31	39
a21.	Did John break the window, but refuse to pay for it?	N^1: he	28	35
a22.	Did Mary wash the cup, but he refuse to drink from it?	N^1: she	53	65
b14.	Mary felt sick, but didn't leave.	Adj: bored	20	21
b15.	Bob became annoyed, and didn't call.	Adj: angry	28	29
b16.	John had a headache, therefore didn't go.	N_2^2: cold	63	66
b17.	Henry needed money, nevertheless didn't work.	N_2^1: food	69	72

Evaluation		+	−	±	?	/
a19.	John had a cold, so didn't go.	51 (63%)	10 (12%)	18 (22%)	2	0
a20.	Henry needed food, yet didn't work.	68 (84%)	4 (5%)	9 (11%)	0	0
a21.	Did he break the window, but refuse to pay for it?	70 (86%)	2 (2%)	6 (7)	3	0
a22.	Did she wash the cup, but he refuse to drink from it?	38 (47%)	15 (19%)	24 (30%)	3	1
b14.	Mary felt bored, but didn't leave.	93 (97%)	3 (3%)	0	0	0
b15.	Bob became angry, and didn't call.	77 (81%)	5 (5%)	13 (14%)	0	1
b16.	John had a headache, therefore didn't go.	64 (67%)	13 (14%)	16 (17%)	2	1
b17.	Henry needed food, nevertheless didn't work.	52 (55%)	19 (20%)	22 (23%)	1	2

Tests a19, a20, b14, b15, b16, and b17 deal with sentences in which there is identity of subjects in two clauses and the second subject is ellipted. An identical subject is ellipted when the clauses are linked by the coordinators and, or, and but; the ellipsis seems to be possible for the conjuncts yet and (to a lesser extent) so, but not for other conjuncts such as therefore and nevertheless (cf. Quirk et al. 1972, 9.34).

The results of the evaluation tests did not correspond with expectations. They distinguished three sets of sentences: (1) b14, with but,

was rated as fully acceptable by almost all; (2) a20 (yet) and b15 (and) were given very high ratings; (3) a19 (so), b16 (therefore), and b17 (nevertheless) were given distinctly lower ratings, though in each test a majority fully accepted the sentence as presented. I was particularly surprised at the number who rejected b15 (and) or considered it to be dubious.

The compliance tests, on the other hand, produced the expected three-way distinction in the expected order of acceptability from highest to lowest: (1) b14 (but) and b15 (and), (2) a19 (so) and a20 (yet), (3) b16 (therefore) and b17 (nevertheless). Details of the noncompliances are shown in Table A.

Some of the rectifications in b15 (and) explain the lower acceptability rating for that sentence relative to the rating for b14 (but). Six subjects replaced and with but and four omitted and. It seems that the logical relationship between the two clauses was not clear enough or and was felt to be insufficient to convey it. Furthermore, even among the 53 compliant responses, 31 omitted the comma between the clauses as compared with the 14 omissions in the 61 compliant responses in b14. The evaluation test produces a global evaluation, which does not necessarily focus on the problem that interests the investigator. Implausibility and even odd punctuation might evoke evaluations that are irrelevant to the investigator. It is significant, on the other hand, that among the compliance tests b15 has the lowest number of responses in which a subject has been inserted in the second clause. For the tests with so, therefore, and nevertheless, the most obvious rectification was insertion of a subject. With yet there was a more obvious replacement: 11 subjects substituted but, one by (perhaps a hybrid of the initials of but and yet, indicating the subject's

vacillation), and one though.

Tests a21 and a22 concern the acceptability of two interrogative clauses linked by but. An earlier British experiment (Greenbaum 1969) dealt with the same problem and also comprised compliance and evaluation tests. We can compare the two sets of results.[7] (Br refers to the corresponding British tests.)

	+	−	?
a21	86%	2%	11%
Br21	74%	11%	15%
a22	47%	19%	34%
Br22	45%	28%	26%

The results are alike in that there is a considerable difference in the acceptability of the two sentences. 21, where the subjects of the two clauses were identical and the second subject was deleted, evoked a far higher acceptability rating than 22, where the two subjects differed and the second subject was necessarily retained.

In the British compliance tests, subjects were asked to make into questions the sentences

John broke the window, but he refused to pay for it.

She washed the cup, but he refused to drink from it.

The compliance tests in that experiment contained a task that introduced the putative problem of acceptability. In the present compliance tests the putative problem was there in the presented question: the task - change of noun to pronoun in the subject of the first clause - was merely a distractor. Subjects are less likely to introduce a deviance than to

retain a deviance in the sentence presented to them (Greenbaum and Quirk 1969, 78). Accordingly, there are far fewer noncompliances in the present experiment than there had been in the British experiment (Br21 89% and Br22 99%). The changes in the present experiment are shown in Table B. The major means of evading the problem of coordinating two questions by but was to omit the second clause, but the same effect was achieved by making one or both of the coordinated clauses declarative, by substituting another linker, or by omitting but. A few inserted the auxiliary in the second clause, although it is doubtful that the change improved the sentence. Several omitted he in the second clause of a22, thereby making the subjects of the two clauses identical, a change that shifted a22 to the type exemplified in a21, the more acceptable analysis.

VII: JUMBLED SENTENCES

Compliance		Task	RNC Scores	Percent
a25.	every the man day her visited	present	64	79
a26.	old that woman car his drove	present	65	80
a27.	each at he time she smiled	present	66	81
a28.	every that each at he drove	present	73	90

Evaluation		+	-	±	?	/
a25.	Every the man day her visits.	0	77 (95%)	2 (2%)	2	0
a26.	Old that woman car his drives.	0	79 (98%)	0	2	0
a27.	Each at he time she smiles.	0	79 (98%)	1 (1%)	1	0
a28.	Every that each at he drives.	1 (1%)	77 (96%)	0	2	1

The four sequences in this set are clearly unacceptable, and the near unanimity in the evaluation tests was expected, as was the lack of differentiation in the reaction to the four sequences.[8] However, though

none of the sequences constitutes an English sentence, there are differences between them, and it was expected that the differences would produce differences in the responses in the compliance tests. The words in a25 and a26 can be rearranged to form acceptable English sentences. There is more than one possibility for rearranging a26:

That old woman drives his car
That woman drives his old car
His old woman drives that car
His woman drives that old car

The multiple ambiguity in the unjumbling of a26 was expected to cause more difficulty than the unique unjumbling of a25. However, it was not noticed that in fact a25 allows for two orderings: every day can be placed initially or finally, though the choice does not involve a change in cognitive meaning:

Every day the man visits her
The man visits her every day

Furthermore, a26 presents a sequence that could be interpreted as jumbled subject followed by jumbled predicate:

old that woman → that old woman
car his drove → drove his car

a27 was expected to be worse that a25 and 126, since not only was there more than one possible rearrangement, but a morphological rectification would be required to produce an acceptable sentence: either he or she would need to be changed to the objective form. Finally, a28 could not be changed into an acceptable sentence by rearrangement and morphological rectification. Thus, the first three sentences contained sets of words that could constitute acceptable sentences either by surface rearrangement

alone of the words or by rearrangement together with a superficial change of case form, whereas a28 would require more radical changes: several lexical changes in the appropriate grammatical categories.

One surprising result was that a number of responses were fully compliant; that is to say, the subjects reproduced the given string after having changed the tense.[9] The first three tests evoked a similar number of compliant responses: 17 (21%), 16 (20%), 15 (19%) respectively; there were fewer compliant responses in a28, presumably because the absence of underlying connections throughout the sequence placed a greater strain on the short-term memory.

A number of responses unjumbled the sequences to produce acceptable sentences, at the same time making the required tense change. This was of course possible only for the first three tests:

a25 - 18 (22%) a26 - 9 (11%) a27 - 8 (10%)

In this respect, a25 is clearly differentiated from a26 and a27. Of the two possibilities for every day, 11 subjects chose initial position and 7 final position. Despite the multiple possibilities for a26, all 9 unjumblings gave the sentence That old woman drives his car, presumably because the sequence in the jumbled string made that sentence the obvious choice. There was no obvious choice for a27; four rearrangements were selected, depending on whether he or she was chosen as subject and where each time was positioned:

She smiles at him each time	(3)
Each time she smiles at him	(2)
Each time he smiles at her	(2)
He smiles each time at her	(1)

The results of the compliance tests suggest that at least some subjects can perceive and reproduce a syntactic structure despite a deviant linear order of the constituents. 26 succeeded in unjumbling at least one of the three sentences, 7 unjumbled two sentences, and 1 unjumbled all three. These numbers would be considerably increased if we took into account partial unjumblings or if we ignored other changes (insertions, omissions, or substitutions) that were made concurrently.

TABLE A

	SUBJECT INSERTED	CONJUNCTION INSERTED	ITEM REPLACED	ITEM REPLACED, SUBJECT INSERTED	ITEM OMITTED	ITEM OMITTED, SUBJECT INSERTED	CLAUSE OMITTED OR MADE NONFINITE	OTHER	FAILURE TO RESPOND
b14 (but)	7			1		1	10		1
b15 (and)	4		6		1	3	13		1
a19 (so)	34						3		1
a20 (yet)	13		10	3			4		1
b16 (therefore)	49	3	2		1		6		2
b17 (nevertheless)	33	2	5	4			20	2	3

TABLE B

	SECOND CLAUSE OMITTED	COORDINATED CLAUSE(S) MADE DECLARATIVE	SECOND CLAUSE SUBORDINATED	BUT → AND	BUT → YET	BUT → OR	BUT OMITTED	+ DID (HE)	HE OMITTED
a21	16	2		8	1			1	
a22	24	6	2	5	1	1	1	4	9 (+and:2)

NOTES

[1]For two of the compliance tests one subject was missing: n was 80 for a20 and 95 for b6.

[2]The female:male ratio was 59:22 for UWMa and 66:30 for UWMb. Subjects were asked to write down where they had spent most of the first fifteen years of their life. The geographical distribution was:

UWMa: Wisconsin 73, Illinois 1, Indiana 1, Pennsylvania 1, Washington 1, the South 1, mixture of places 2, none given 1

UWMb: Wisconsin 83, Illinois 3, Michigan 2, Iowa 1, New Jersey 2, New York 1, none given 4

Subjects specialized in a wide range of disciplines, though mainly within the Humanities. They took part in the experiments voluntarily for a small payment.

[3]There is evidence that sequence and position in the battery can affect results (Greenbaum 1973 and in press a).

[4]In the experiments reported on in Greenbaum and Quirk 1970 the material was presented orally and the responses in writing. Oral presentation may be necessary where prosodic information is relevant, but it has the disadvantage that the material and the responses are not in the same medium, introducing a variable that may affect results.

[5]The slides were projected from a carrousel slide projector. A Kodak sound-synchronizer was used to coordinate the projector with a stereo-taperecorder. This unit enabled the experimenter to record and play back signals on one track of the stereo tape, while the other track was used

for instructions. The signals, which were not audible to the audience on the playback, activated the carrousel, so that a slide was replaced after three seconds by a cardboard square that blacked out the projector; after 15 seconds the square in turn was replaced by the next slide.

[6] Hardly and practically belong to different subcategories of downtoners (Quirk et al. 1972, 329) and may well differ in their positional norms when more than one auxiliary is present. As a negative minimizer, hardly perhaps always selects the position after the first auxiliary; as an approximator, practically perhaps always selects the preverb position.

[7] The evaluation tests were the same in both the British and American experiments, except that John was the subject in the first experiment and not he and also the second experiment allowed a 'don't know' response as well as a 'somewhere between' response. The two responses are conflated to allow a more direct comparison between the two sets of results.

[8] The few responses other than complete rejection must be considered facetious.

[9] Change of past tense to either the -s or base form was counted as compliant, since in non-sentences there could hardly be a requirement for number concord. However, almost all compliant responses gave the -s form, presumably because none of the sequences contained a plural noun: there were two base forms in each of a25, a26, and a27, and one in a28.

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APPENDIX I

TABLE 1

COMPLIANCE TESTS: UWMa

	Test Sentence	Task	RNC Scores n=81	%
1.	The price has practically doubled.	N_1^1: prices	16	20
2.	The price practically has doubled.	N_1^1: prices	43	53
3.	He could hardly sit still.	N_1^1: they	1	1
4.	He hardly could sit still.	N_1^1: they	42	52
5.	He badly needed the money.	N^1: they	14	17
6.	I despise him utterly.	past	13	16
7.	I utterly despise him.	past	1	1
8.	His arrival was utterly expected.	present	24	30
9.	The students explained the problem soon.	N_1^1: student	29	36
10.	Your brothers like the house soon.	N^1: brother	39	48
11.	The car certainly broke down.	question	43	53
12.	He probably stayed late.	question	48	59
13.	They possibly left early.	question	28	35
14.	They perhaps came late.	question	36	44
15.	He can usually explain what they mean.	negative	37	46
16.	He can often write well.	negative	35	43
17.	You will surely believe him.	negative	71	88
18.	You will certainly want this.	negative	73	90
19.	John had a headache, so didn't go.	N_2^2: cold	39	48
20.	Henry needed money, yet didn't work.	N_1^2: food	31	39
21.	Did John break the window, but refuse to pay for it?	N^1: he	28	35
22.	Did Mary wash the cup, but he refuse to drink from it?	N^1: she	53	65
23.	It's presumable that Sylvia will leave home.	N^2: she	10	12
24.	It's sure that he smokes cigarettes.	N^3: cigars	9	11
25.	every the man day her visited	present	64	79
26.	old that woman car his drove	present	65	80
27.	each at he time she smiled	present	66	81
28.	every that each at he drove	present	73	90

TABLE 2

COMPLIANCE TESTS: UWMb

	Test Sentence	Task	RNC Scores n=96	%
1.	He tells always the truth.	future	88	92
2.	She plays quietly the piano.	future	68	71
3.	They help mainly the old.	future	26	27
4.	His son despises the school quickly.	past	27	28
5.	My friend quickly trusts such people.	past	18	19
6.	Your brother owns the house soon.	past	56	59
7.	The student soon explains the problem.	past	19	20
8.	They greatly admire his courage.	question	8	8
9.	They utterly hate that course.	question	11	11
10.	He humbly presented his apologies.	question	15	16
11.	Honestly, it did rain the whole day.	N_3^2: week	21	22
12.	Wisely, she did mail it on Monday.	N_2^2: Tuesday	22	23
13.	Proudly, they did march out of the palace.	N^2: hall	33	34
14.	Mary felt sick, but didn't leave.	Adj: bored	20	21
15.	Bob became annoyed, and didn't call.	Adj: angry	28	29
16.	John had a headache, therefore didn't go.	N_2^2: cold	63	66
17.	Henry needed money, nevertheless didn't work.	N^2: food	69	72
18.	It's sure that Sylvia will leave home.	N_2^2: she	18	19
19.	It's presumable that he smokes cigarettes.	N_3^2: cigars	21	22
20.	It's certain that she writes poems.	N^3: novels	5	5
21.	Wise, they turn down the offer.	past	23	24
22.	Happy as always, she sings to them.	past	16	17
23.	Delighted, she approves of the plan.	past	9	9
24.	Unemployed, he calls for their help.	past	12	12

TABLE 3

EVALUATION TESTS: UWMa

	Test Sentence	n = 81					
		+	−	±	?	/	% 'minus'
1.	The prices have practically doubled.	79	1	0	0	1	1
2.	The prices practically have doubled.	39	14	28	0	0	17
3.	They could hardly sit still.	80	0	1	0	0	0
4.	They hardly could sit still.	41	11	25	2	2	14
5.	They badly needed the money.	52	7	22	0	0	9
6.	I despised him utterly.	46	9	25	1	0	11
7.	I utterly despised him.	74	2	5	0	0	2
8.	His arrival is utterly expected.	21	27	29	4	0	33
9.	The student explained the problem soon.	18	31	29	2	1	39
10.	Your brother likes the house soon.	0	68	11	2	0	84
11.	Did the car certainly break down?	7	29	43	1	1	36
12.	Did he probably stay late?	12	34	30	3	2	43
13.	Did they possibly leave early?	49	9	21	0	2	11
14.	Did they perhaps come late?	50	5	24	1	1	6
15.	He can't usually explain what they mean.	56	7	16	0	2	9
16.	He can't often write well.	37	14	29	1	0	17
17.	You won't surely believe him.	14	23	42	1	1	29
18.	You won't certainly want this.	16	26	37	0	2	33
19.	John had a cold, so didn't go.	51	10	18	2	0	12
20.	Henry needed food, yet didn't work.	68	4	9	0	0	5
21.	Did he break the window, but refuse to pay for it?	70	2	6	3	0	2
22.	Did she wash the cup, but he refuse to drink from it?	38	15	24	3	1	19
23.	It's presumable that she will leave home.	67	3	10	1	0	4
24.	It's sure that he smokes cigars.	35	13	30	2	1	16
25.	Every the man day her visits.	0	77	2	2	0	95
26.	Old that woman car his drives.	0	79	0	2	0	98
27.	Each at he time she smiles.	0	79	1	1	0	98
28.	Every that each at he drives.	1	77	0	2	1	96

TABLE 4

EVALUATION TESTS: UWMb

	Test Sentences	n = 96					
		+	−	±	?	/	% 'minus'
1.	He told always the truth.	19	52	21	2	2	55
2.	She played quietly the piano.	4	75	17	0	0	78
3.	They helped mainly the old.	45	18	32	1	0	19
4.	His son despised the school quickly.	37	28	31	0	0	29
5.	My friend quickly trusted such people.	56	16	20	2	2	17
6.	Your brother owned the house soon.	9	73	12	1	1	77
7.	The student soon explained the problem.	87	1	7	1	0	1
8.	Do they greatly admire his courage?	65	6	20	1	4	7
9.	Do they utterly hate that course?	53	11	25	5	2	12
10.	Did he humbly present his apologies?	65	10	17	1	3	11
11.	Honestly, it did rain the whole week.	74	8	14	0	0	8
12.	Wisely, she did mail it on Tuesday.	53	18	21	1	3	19
13.	Proudly, they did march out of the hall.	30	29	37	0	0	30
14.	Mary felt bored, but didn't leave.	93	3	0	0	0	3
15.	Bob became angry, and didn't call.	77	5	13	0	1	5
16.	John had a headache, therefore didn't go.	64	13	16	2	1	14
17.	Henry needed food, nevertheless didn't work.	52	19	22	1	2	20
18.	It's sure that she will leave home.	71	9	12	2	2	10
19.	It's presumable that he smokes cigars.	68	7	19	1	1	7
20.	It's certain that she writes novels.	80	3	11	0	2	3
21.	Wise, they turned down the offer.	28	42	25	1	0	44
22.	Happy as always, she sang to them.	76	7	12	1	0	7
23.	Delighted, she approved of the plan.	81	3	10	0	2	3
24.	Unemployed, he called for their help.	62	8	21	4	1	8

APPENDIX II

INSTRUCTION SHEET FOR COMPLIANCE TESTS

You will be shown at regular intervals of time a slide containing an instruction and a sentence below the instruction. The instruction will tell you what task to perform on the sentence. There will be several kinds of tasks, all of them quite simple to do. You will be asked to replace one word by another. For example, one slide might show:

Replace he by they

He wants a drink.

You would then write down They want a drink. You will also be asked to change the tense of the verb: into the past, present, or future. For example, if you were told to turn the verb into the present in the sentence:

My friend often wrote to me.

you would respond with My friend often writes to me. Other tasks require you to make a sentence into a question or to make it negative. If you were asked to make this sentence into a question:

They play well.

you would simply write Do they play well? And if you were asked to make it negative, you would put They don't play well.

Each slide will be shown for only a few seconds, so you will have to memorize the instruction and sentence. You should only start writing your response when the instruction slide switches off. When you hear the work Next it means that the next slide is being shown. If you are not already watching the screen you must immediately look up and read the next slide. Each response goes on a separate page of the booklet in front of you.

There is one last thing I should mention. Sentences heard in isolation often sound strange. I must emphasize that you should make only the changes that the instructions specify.

The first four slides are intended to give you practice in the tasks and in the time you will be allowed for the performance of each task. You should write your responses for the practice slides on the first four pages of the booklet which are numbered a, b, c, and d.

If these instructions are not clear, please ask me.

INSTRUCTION SHEET FOR EVALUATION TESTS

This time you will not be shown slides.

The booklet in front of you contains a sentence on each page. I shall ask you to look at each sentence in turn and make a quick judgement as to how natural and normal it seems to you. If you think a sentence is perfectly natural and normal, put a plus (+) next to it. If you think it is wholly unnatural or abnormal, put a minus (-). If you think it is somewhere between these extremes ('a bit dubious', perhaps) put a half ($\frac{1}{2}$). And if you are not sure what to put, then put a question mark (?). The scale is given at the top of each page as a reminder.

As before, when you hear the word Next you must turn over the page. You will have only a few seconds to write down your response, in order to ensure that you are giving an immediate reaction. No practice will be given.

If these instructions are not clear, please ask me.